REMARKS

The Office Action dated June 4, 2007 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claims 29-38, 43-45 and 54-60 are respectfully submitted for consideration.

Claims 29-38, 43-45 and 54-59 were rejected under 35 U.S.C. 103(a) as being unpatentable over a publication titled "SIP: Session Initiation Protocol" to Handley (hereinafter Handley), in view of U.S. Patent No. 6,425,004 to Hardjono (hereinafter Hardjono), in further view of U.S. Patent No. 6,865,681 to Nuutinen (hereinafter Nuutinen). The Office Action took the position that Handley disclosed all of the features of these claims except extracting the scheduled result from the session invitation message and forward the session invitation message without the scheduled result to the subscriber equipment, and to verify an authentication result with a scheduled result. Therefore, the Office Action combined the teachings of Handley with the teaching of Hardjono and Nuutinen in an effort to yield all of the elements of claims 29-38, 43-45 and 54-59. The rejection is traversed as being based on references that neither teach nor suggest the novel combination of features clearly recited in claims 29-38, 43-45 and 54-59.

Claim 29, upon which claims 30-38 and 43-45 depend, is directed to a network control element, wherein, during a subscriber equipment terminated call, the network control element is configured to send a session invitation message to the subscriber equipment. The session invitation message includes authentication information. The network control element is further configured to determine whether it has to perform a

verification of the authentication. If the network control element does not have to perform the verification, the network control element is configured to forward a scheduled result to a second network control element by including the scheduled result into the session invitation message. If the network control element has to perform the verification, the control element is configured to receive the scheduled result from another network control element. The scheduled result is included in the session invitation message. The network control element is further configured to extract the scheduled result from the session invitation message and to forward the session invitation message without the scheduled result to the subscriber equipment, and verify an authentication result with a scheduled result.

Claim 54, upon which claims 55-58 depend, is directed to a method for performing authentication of a subscriber during a subscriber equipment terminated call. The method includes sending a session invitation message from a network control element to the subscriber equipment. The session invitation message includes authentication information. The method also includes determining, by the network control element, whether the network control element has to perform a verification of the authentication or not. In case the network control element does not have to perform the verification, the method includes forwarding a scheduled result to a second network control element by including the scheduled result into the session invitation message. In case the network control element has to perform the verification, the method includes receiving the scheduled result from another network control element. The scheduled

result is included in the session invitation message. The scheduled result is extracted from the session invitation message and the method further includes forwarding the session invitation message without the scheduled result to the subscriber equipment. An authentication result is verified with a scheduled result.

Claim 59 is directed to a computer program embodied on a computer-readable medium to perform authentication of a subscriber during a subscriber equipment terminated call, the computer program includes computer code for causing a processor to perform the following method. The method includes sending a session invitation message from a network control element to the subscriber equipment. The session invitation message includes authentication information. The method also includes determining, by the network control element, whether the network control element has to perform a verification of the authentication or not. In case the network control element does not have to perform the verification, the method includes forwarding a scheduled result to a second network control element by including the scheduled result into the session invitation message. In case the network control element has to perform the verification, the method includes receiving the scheduled result from another network control element. The scheduled result is included in the session invitation message. The scheduled result is extracted from the session invitation message and the method further includes forwarding the session invitation message without the scheduled result to the subscriber equipment. An authentication result is verified with a scheduled result.

Claim 60 recites a network control apparatus, wherein, during a subscriber equipment terminated call, the network control apparatus includes sending means for sending a session invitation message to the subscriber equipment. The session invitation message includes authentication information. The apparatus also includes determining means for determining whether it has to perform a verification of the authentication and transceiver means for forwarding a scheduled result to a second control network by including the scheduled result into the session invitation message, if the network control element does not have to perform the verification. If the network control element has to perform the verification, the transceiver means is configured for receiving the scheduled result from another network control element. The scheduled result is included in the session invitation message. The apparatus also includes extracting means for extracting the scheduled result from the session invitation message and forwarding the session invitation message without the scheduled result to the subscriber equipment and verification means for verifying an authentication result with a scheduled result.

As outlined below, Handley, Hardjono and Nuutinen do not teach or suggest the all of the elements of the pending claims.

Handley is directed to SIP protocol. The INVITE message indicates that a user or service is being invited to participate in a session. The message contains a description of the session to which the callee is being invited. See page 27. A user that wishes to authenticate itself with a server may include an authorization request-header field with the request. The authorization field value consists of credentials containing the

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authentication information of the user agent. See page 44 section 6.11. Handley further describes a Proxy-Authorization request-header field that allows the client to identify itself to a proxy which requires authentication. Handley further states that "unlike Authorization, the Proxy-Authorization header field applies only to the next outbound proxy that demanded authentication using the Proxy-Authenticate field. See page 60 section 6.27.

Hardjono is directed to detecting and locating a "misbehaving" device in a network. Hardjono describes using an authentication scheme to allow a receiving device to authenticate that a particular packet originated in a particular sector. For example, a receiving device authenticates the packet by computing a sector verification tag and comparing the sector verification tag with a sector tag of the packet.

Nuutinen is directed to a VOIP terminal security module. According to one example, Nuutinen describes that the receiver of a message who possesses the same secret key as the sender, calculates the hash of the received message together with the secret key and obtains another MAC. If the two MACs match (one MAC being generated originally, see col. 12 lines 16-17), the receiver can be sure that the message has not been modified and thus it comes from someone who has possession of the key.

Applicant submits that the combination of Handley, Hardjono and Nuutinen does not teach or suggest the combination of elements recited in the pending claims. Each of the pending claims, in part, recites that if the network control element does not perform the verification, forwarding a scheduled result to a second network control element by

including the scheduled result into the session invitation message. Handley does not teach or suggest these features. In Handley, the INVITE message does not include an authentication result. As discussed above, in Handley only the credentials are forwarded.

Neither Hardjono nor Nuutinen cure the deficiencies of Handley, as noted above. Harjono is silent with regards to verifying an authentication result with a scheduled result. As discussed above, Hardjono merely compares sector tags. Thus, a comparison of the verification result and the authentication (scheduled) result is not performed. Furthermore, one skilled in the art would not be motivated to modify Handley with Harjono, as the two references are non-analogous.

Nuutinen also fails to disclose or suggest that if the network control element does not perform the verification, forwarding a scheduled result to a second network control element by including the scheduled result into the session invitation message, as recited in the pending claim. Other than being cited for describing another authentication scheme, Nuutinen appears at best, to be redundant. As such, both Hordjono and Nuttinen are silent with regards to extracting the scheduled result from the session invitation message and forwarding the session invitation message to the subscriber equipment, as recited in the pending claims.

All of the cited references fail to disclose or suggest at least the features of "if the network control element does not perform the verification, forwarding a scheduled result to a second network control element by including the scheduled result into the session invitation message," and "extracting the scheduled result from the session invitation
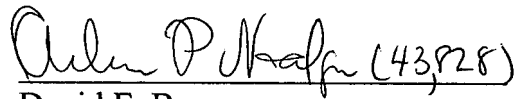
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message and forwarding the session invitation message to the subscriber equipment," as recited in the present claims. Therefore, Applicant respectfully asserts that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Handley, Hardjono nor Nuutinen, whether taken singly or combined, teaches or suggests each feature of claims 29, 54, 59 and 60 and hence, dependent claims 30-38, 43-45 and 55-58 thereon.

As noted previously, claims 29-38, 43-45 and 54-60 recite subject matter which is neither disclosed nor suggested in the prior art references cited in the Office Action. It is therefore respectfully requested that all of claims 29-38, 43-45 and 54-60 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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